

The **Connection**

A Well Drilling Industry Newsletter



Missouri Department of Natural Resources
Division of Environmental Quality

Volume 13 Number 1

Summer 2006

Well Installation Board Meeting Aug. 25

The next meeting of the Well Installation Board is scheduled for Friday, Aug. 25, at the department's Division of Geology and Land Survey, 111 Fairgrounds Road in Rolla. The meeting will be held in the division's annex building, located at the end of Gale Drive. Open Session will begin at 10 a.m.

Continuing Education Survey

On March 13th, Wellhead Protection Section staff mailed each permitted company the continuing education survey and a cover letter describing the continuing education program as it is now written.

A total of 843 surveys were mailed; 249 surveys were returned. The 30 percent return rate was higher than expected for a normal survey response.

Results of the survey are as follows:

Question 1—If a program to provide continuing education was developed in Missouri, what types of courses do you think would be of benefit to you? (Mark all that apply).

Order of responses:

1. Rule & Regulation Updates (167)
2. Basic Geology & Groundwater Hydrology (129)
3. Well Construction Variation throughout Missouri (118)
4. Basic/Intermediate/Advanced Pump Installation (103)
5. Safety on the Job Site (95)
6. Supplier & Vendor Presentations (86)
7. Business & Financial Management (55)

8. Economic Analysis for Groundwater Remediation (50)
9. How to Drill a Public Well (43)

"Other" Responses to Question 1

- DOT Regulations
- Oil & Gas Drilling
- Water Quality Problems in MO
- Well Abandonment

Question 2—Which of the following would you see as important to make the program easier to comply with and be of benefit to you?

Order of responses:

1. Courses that could be viewed at home via the Internet, CD-ROM, DVD, video, etc. (174)
2. Courses offered multiple times per year (129)
3. Courses offered within a one-hour drive of my home/business (119)
4. All required courses offered in a single day (111)

"Other" Responses to Question 2

- Allow in-house training (train the trainer)
- Offer courses around the state, not just in Rolla or Jefferson City
- Accept NGWA credits
- Allow college courses

Question 3—Is it in the best interest of Missouri contractors to allow reciprocity from other states that already require continuing education?

Yes = 160 votes (64%)

No = 49 votes (20%)

Comments regarding question 3

- Only allow reciprocity with states which border Missouri
- The majority of other states that have a continuing education program allow reciprocity
- Only allow if corresponding state will accept credits from Missouri

Question 4—How important do you think it is to have a program for continuing education for the well drilling industry?

Very Important (55) 22%
Somewhat Important (99) 40%
Not Important (70) 28%
No Opinion (25) 10%

Comments and Concerns

- Reciprocity is critical to making this work
- Require only one person from company to obtain CEUs
- CEUs are not necessary—bad work will catch up with you
- Should not be required for restricted permits
- Keep it simple
- No new fees
- Require CEU's on a two-year cycle
- No CEUs—upgrade initial permit requirements
- Make this mandatory for new permittees only
- Keep away from special interest groups
- Should not be a social gathering
- This is in the best interest of everyone; but it must be simple for everyone

The division presented these results to the Well Installation Board at its regular meeting in May. Staff proposed the following next steps:

1. Hold stakeholder meetings to further discuss the proposal with the industry
2. Modify the draft proposal as appropriate based on stakeholder input.
3. Share the revised rule with stakeholders and the Board
4. Present final draft to the Well Installation Board

You may find the current draft version of this rule at www.dnr.mo.gov/env/wpp/rules/wpp-rule-dev.htm.

A flyer will be sent to all companies detailing the location and time of the stakeholder meetings. If you have any questions please contact Sheri Fry at (573) 368-2115 or by e-mail at sheri.fry@dnr.mo.gov.

Well Drilling Wastewater Management Fact Sheet Now Available

The department has developed a new fact sheet to help drillers manage wastewater from well drilling sites. The new publication can be found online at www.dnr.mo.gov/pubs/pubs2189.pdf.

BACKGROUND

Discharging wastewater from well drilling sites may cause water pollution and violate the Missouri Clean Water Law. Wastewater from drilling operations contains sediment, mud, foam and other drilling additives that can pollute a stream or river (even if it is temporarily dry), a wetland, channel or well.

Well cuttings and substances used in the drilling process can cause visual, chemical and biological changes to nearby streams. These changes are recognized as pollution and can degrade water quality supporting fish and aquatic life. This creates violations of the Missouri Clean Water Law and Regulations.

REGULATORY REQUIREMENTS

A permit is not needed when drilling or developing a well as long as you don't pollute a stream, lake or other waterway. Contractors who pollute streams, lakes or other waterways may be required to get a permit and could face penalties and other actions.

IMPORTANT CONSIDERATIONS

Each drilling project presents a set of unique factors to consider. Some of these factors are the steepness of the site, how close it is to the nearest water body and the amount of recent rainfall. These factors affect the amount of runoff produced by the drilling process and the distance that the drilling wastewater can travel away from the wellhead.

Well drillers should adopt practices and methods that keep drilling wastewater on site and out of



nearby storm drains or streams. Following are some of the ways this can be done:

Take care not to waste any more water than necessary during well drilling thereby limiting the amount of wastewater runoff.

Collect and control on-site any wastewater produced during the drilling process.

Dispose of drilling wastewater to a municipal sanitary sewer collection system when possible .

Use Best Management Practices (Referred to as BMPs) to allow only the controlled release of drilling wastewater that is free of sediment, mud, foam and other drilling additives.

BEST MANAGEMENT PRACTICES (BMPs)

When you change the well drilling process or install structures to either avoid discharge or limit the pollutants in the drilling wastewater to the least amount possible during well drilling and development this is referred to as using Best Management Practices. BMPs are also described as practical ways to ensure minimal risk to the environment without costing a lot of extra time or money. It is the driller's responsibility to make sure that BMPs are put in place and maintained during the entire well drilling process. Some examples of BMPs are

- Catchment Basins – A temporary basin that is sized to hold the drilling wastewater until it can either evaporate or it clears up. When clear, the drilling wastewater can be slowly released.
- Filtering Devices – Basins followed by straw bales or cloth capable of removing most of the solids produced in the well drilling process that are in the water. Once clear, the water can be slowly released.
- Land Application – Drilling wastewater can be used to irrigate a land area near the job site if approval is obtained from the landowner and the irrigation rate is slow enough to prevent ponding, pooling or runoff.

For more additional information, contact the Department of Natural Resources' Wellhead Protection Section at 1-800-361-4827 or (573) 368-2165.

Call Before You Drill (1-800-Dig-Rite)

The Missouri One Call System (MOCS) was established to protect underground facilities and assist excavators and utilities in complying with Missouri law (RSMo 319.015 to 319.050) and OSHA rules (1926.651) in regard to identifying underground utility location before excavation is started. Excavation is any operation in which earth, rock or other material in or on the ground is moved, removed or otherwise displaced by mean of any tools or equipment and includes drilling and well drilling, auguring, boring, and driving. This regulation applies to everyone, except for residential and agricultural property owners or renters personally excavating on their own property (although due diligence is still required for the property owner/renter).

Liability for repair of underground utilities and administrative penalties may apply to any excavator who does not give notice to MOCS and obtain information concerning the possible location of underground utilities. The notice of intent to excavate can be submitted to the notification center by toll-free telephone number operated on a 24-hours per day, seven days per week basis. MOCS request that calls be made at least two working days before drilling starts.

The notice of intent to excavate includes the items listed on the Missouri One Call System location request forms for telephone or fax contact. Copies of the request forms and other information about MOCS are available on the Internet at www.mo1call.org.

Forms Now Available On The World Wide Web

In an effort to ease the paperwork process, the Wellhead Protection Section has placed several forms online.

Go to www.dnr.mo.gov/forms, Select Wellhead Protection from the drop-down menu, and choose the form you want. Forms are available in print only format, or fill in then print format.

The current list of forms includes

- Abandonment Registration Record, Form--

continued on p. 5



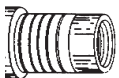
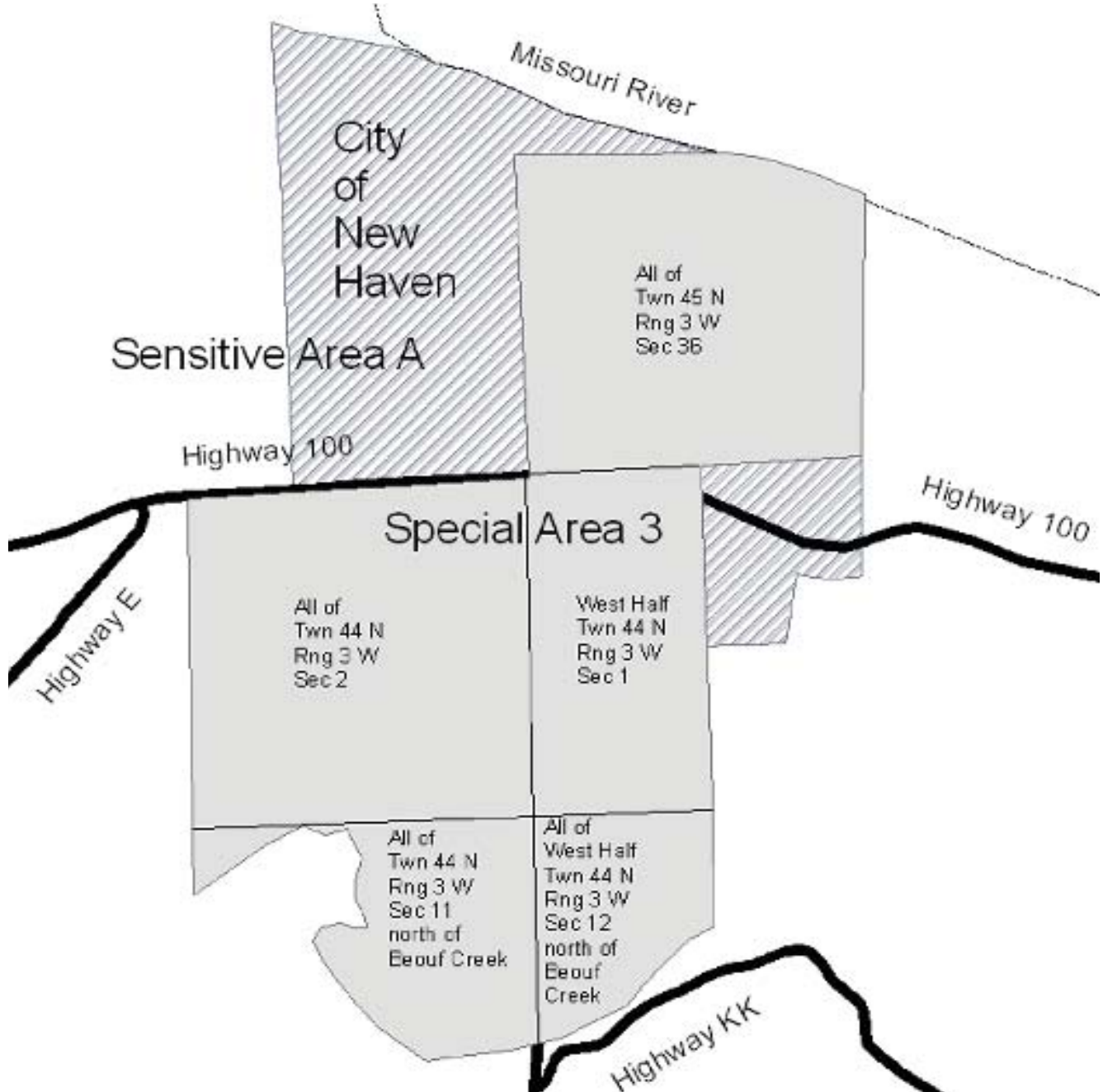
New Haven Rule

Special Area 3 became an official special drilling area in April 2006 (please see attached figure). Special Area 3 is formed by portions of the city of New Haven southward into a small part of Franklin County

It is necessary to utilize more stringent well domestic well and heat pump well construction standards for new wells and to limit the

deepening of existing water wells. The department must be consulted before constructing a new well in Special Area 3. The division will provide specific guidance on well drilling protocol and construction specifications on a case-by-case basis. The permittee must have written department approval for all new domestic water wells and heat pump wells prior to construction.

Upon completion of printing, copies of the rule will be sent to all permittees for inclusion in their rule book.



continued from p. 3

MO 780-1603

- Casing Depth Request, Form--MO 780-1426
- Closed Loop Heat Pump Certification Record, Form--MO 780-1413
- Contractor Permit Application, Form--MO 780-1731
- Domestic/Multifamily Well Record and Pump Information Data, Form--MO 780-1902
- Experience Voucher, Form--MO 780-1423
- High Yield and Public Well Record and Pump Information Data, Form--MO 780-1901
- Investigation Request, Form--MO 780-1618
- Monitoring Well Certification Record, Form--MO 780-1415
- Public Water Supply Notification, Form--MO 780-1427
- Pump Information Record, Form--MO 780-1900
- Reconstruction Registration Record, Form--MO 780-1414
- Testing Application, Form--MO 780-1424
- Variance Request, Form--MO 780-1422
- Vehicle Application, Form--MO 780-1425

Completed forms must be mailed, along with any applicable fees, to the Department of Natural Resources. Forms can not be submitted online at this time.

New GPS Rule

The new GPS rule became effective Jan. 1, 2006. The rule requires all reports to the department (including water wells, monitoring wells, heat pump wells and test holes plus well abandonment and pump reports) be submitted with a location in degrees, minutes and seconds for latitude and longitude to 1 place after the seconds decimal point: i.e., latitude 38° 59' 59.9"N, longitude 94° 01' 01.0"W. The GPS receiver shall be set to the North American Datum 1983 (NAD83) geodetic datum.

Most all permittees have complied with the GPS reporting requirement. Quite a few permittees do not record the lat/long in degrees, minutes, and seconds (DMS). The following has examples:

W longitude	System
91.55555	decimal degrees
91 33.33'	decimal minutes
91 33' 19.8"	degrees, minutes and seconds

All of the above readings are for the same spot. Please report your GPS locations with readings like the third example. The GPS unit can be tuned to report DMS or any reading can be converted mathematically to DMS.

St. Louis Area Air Permit Requirements

The Department of Natural Resources' Air Pollution Program requires excavations in the St. Louis area to be conducted under an Air Pollution Permit - Stage II Gasoline Vapor Recovery Construction Permit (10 CSR 10-5.220). The St. Louis Metropolitan Area comprises St. Louis, St. Charles, Jefferson, and Franklin counties and the City of St. Louis. This regulation applies to all well drilling that requires excavation of concrete or asphalt surfaces before initiation of the drilling process at a new or existing facility undergoing vapor recovery.

A licensed contractor and facility owner each received \$2,000 administrative penalties for constructing a monitoring well at a service station in the metro area without a permit. The site had sustained a gasoline release and was undergoing remediation. The area around the monitoring well was paved and the pavement was cored to gain access for well drilling. Personnel at the Air Pollution Program decided to suspend the penalty fee pending no further violations in the next two years.

This article is to inform others of this permit requirement.

Information about Metro Area vapor recovery permits may be obtained from the St. Louis Regional Office at (314) 416-2960. Ask for Bill Ruppel or one of the staff in the Vapor Recovery Unit.

Reorganization

The Wellhead Protection section has been a part of the reorganization of the Department of Natural Resources. The Oil and Gas geologist has been transferred to the Division of Geology and Land Survey. Questions and information about oil and gas wells and Underground Injection Control Wells (UIC wells) should be directed to Jeff Jaquess at (573) 368-2195.

Wellhead is now a section within the Public Drinking Water Branch of the Water Protection



Program. Water Protection Program is one of several programs within the Division of Environmental Quality.

Questions and information about water wells, monitoring wells, heat pump wells, test holes and borings, and well abandonment should be directed to us at (573) 368-2165. You can also use the forms available on the Internet to contact us (see Forms on the Web article).

Welcome New Employee

Eric L. Hohl began working for the Wellhead Protection Section April 17, 2006 as a Technical Assistant. His duties include checking well records, well search reports upon request, field cases, and providing information to telephone callers. He previously worked for the Division of State Parks Survey Crew for more than eight years before coming to work in the Wellhead Section. While working for Parks he helped with numerous projects including locating State Parks and Historical sites boundaries and original government land section corners. Eric says he is looking forward to working with everyone in this section.

Welcome

The following individuals are now part of the Missouri Department of Natural Resources permitted contractor community:

- A D Jacobson Company Inc – Kollin Knox
- B & R Machining and Pump Service – John Williams
- Cahoy Pump Service – Darin Cahoy, Timothy Gessert
- Commercial Mechanical Inc – James Long
- Douglas Pump Service – Michael Vanaken, Mateo Fuimaono
- Lefty's Pump & Drilling – Gerald Pinkley, Jarrod Hilton, Billy Cutbirth, Jeremy Stevens
- Mateco Drilling Company – Robert Dreyer, Greg Sawyer
- MO DNR – Brenna McDonald
- Prosonic Corp – Rodney Parr, Fredrick Hafner
- Pumps & Water Systems – Mel Hancock
- Rehagen Heating & Cooling – Wayne Rademan
- Smith & Co Engineers – Johnny Davis
- Starks Drilling – Keith Starks
- Thiele Geotech Inc – Joseph Carman
- URS Corporation – Rick Horner



Farewell

The people addressed below are no longer permitted to operate as contractors according to the Water Well Drillers Act and Well Construction Regulations:

- Associated Drilling Inc – Brian Chrest
- Buckallews Electric Service – Herbert Buckallew
- Christopher Adams PG – Christopher Adams
- Christy Minerals Co – Arthur Vaughn
- CM2 Inc – Walter Crabb
- Drill It Well Inc – Dana Hoss, Zachariah Jones
- Gingerich Well & Pump Service – Emery Gingerich
- Golder Associates Inc – Jeffrey Clark
- Horizon Geohydrology Inc – Gilbert Zemansk
- John Geller
- Layne-Western Co Inc – David Gotto
- Robinson Well Drilling – Curtis Statler
- Rowden Plumbing & Pump Service – Billy Joe Rowden
- Shannon & Wilson Inc – Lawrence Rosen
- Stiegman-Wells Pump Service – George Wells, Monte Stiegman
- Terracon – Jon McDaniel, Michael Dustman
- Tetra Tech – Margaret Moyse
- The Retec Group Inc – Craig Wood
- The Water Boys Inc – Raymond Slentz
- Tri County Electric Co-Op – Joseph Sebolt
- Weston Drilling & Pump Co – James Weston

Wellhead Protection Section Phone Number Listing

Bob Archer, Section Chief
(573) 368-2165

Information on legislation, enforcement and monitoring well construction, Newton and Jasper county Wells.

E-mail: bob.archer@dnr.mo.gov

Sheri Fry, Unit Chief - Administrative Unit
(573) 368-2115

Technical assistance in the area of regulations, well certification, and enforcement procedures. Permitting and testing information.

E-mail: sheri.fry@dnr.mo.gov

Matt Parker, Unit Chief - Hydrogeologic
Investigation Unit
(573) 368-2170

Field investigation, variances, casing depths and
well construction enforcement.

E-mail: matthew.parker@dnr.mo.gov

Eric Hohl
(573) 368-2168

Water well construction information and certifica-
tion, heatpump certification, abandonment
registration, location of wells, and well searches.

E-mail: eric.hohl@dnr.mo.gov

Jeannie Hoyle
(573) 368-2450

Permitting and testing information. Information
regarding Notices of Violation

E-mail: Jeannie.hoyle@dnr.mo.gov

Mary Catherine Price
(573) 368-2174

Well Installation Board Secretary and information
regarding Notices of Violation (NOVs).

E-mail: Mary.catherine.price@dnr.mo.gov

Paul Meyer
(573) 368-2159

Water well construction, well plugging and
field investigation.

E-mail: paul.meyer@dnr.mo.gov

Vacant
Section Secretary
(573) 368-2165

General information, requests for forms, county
maps, publications, invoicing and fee questions
and drought assistance well certification letters.

Kyle Rollins
(573) 368-2196

Casing depth information, variances, field investi-
gation, certification of monitoring wells and
well construction.

E-mail: kyle.rollins@dnr.mo.gov

Joe Schlueter
(573) 368-2316

Well plugging, field investigation and
well construction.

E-mail: joe.schlueter@dnr.mo.gov

Cathy Smith
(573) 368-2167

Casing depth information, variances, field investi-
gation, certification of monitoring wells and
well construction.

E-mail: cathy.smith@dnr.mo.gov

Ruth Ann Williams
(573) 368-2318

Information regarding pump information records
submitted, matching of well records to pump
records, public water supply notification forms.

E-mail: ruth.williams@dnr.mo.gov

Vacant
(573) 368-2375

General information, requests for forms, county
maps and publications.



Editor's Note: The Connection is published quarterly by the Missouri Department of Natural Resources' Division of Environmental Quality. If you have any suggestions, ideas or comments concerning this newsletter, please let us know. Send comments to:

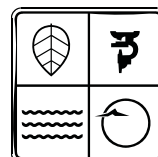
Missouri Department of Natural Resources, Wellhead Protection Section, PO Box 250, Rolla, MO 65402-0250, by phone to (573) 368-2165, or by Fax to (573) 368-2317

Doyle Childers, Director
Department of Natural Resources

Dan Schuette, Director
Division of Environmental Quality



Recycled Paper



Missouri Department of Natural Resources
Wellhead Protection
PO Box 250
Rolla, MO 65402-0250
573-368-2100 Please circulate!

PRSRT, STD.
U.S. POSTAGE
PAID
PERMIT #215
ROLLA, MO